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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,141	09/23/2003	Sherif Yacoub	200300101-1	2017
22879 7590 05/16/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER SAINT CYR, LEONARD				
ART UNIT		PAPER NUMBER		
2626				
NOTIFICATION DATE		DELIVERY MODE		
05/16/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/668,141

**Applicant(s)**

YACOB, SHERIF

**Examiner**

LEONARD SAINT CYR

**Art Unit**

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. In view of the appeal brief filed on 02/19/08, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1 - 20 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that assigning the speech utterance to a single ASR engine if assessing resources is within a threshold value; assigning the speech utterance to a plurality of different ASR engines if assessing resources is within a threshold value; and

generating text of the speech utterance with either the single ASR engine or plurality of ASR engines.

The examiner agrees, but the claims are now rejected in view of new grounds of rejection (Bennett et al., and Johnson).

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al., (US PAP 2002/0193991) in view of Johnson (US Patent 6,728,671).

As per claims 1, 8, and 14, Bennett et al., teach an automatic speech recognition (ASR), that comprises:

receiving a speech utterance from a user; assessing resources of a plurality of different ASR engines ("the input stream is received"; paragraph 23, line 3);

assigning the speech utterance to a single ASR engine based on availability of the recognizers ("routed to one or more selected recognizers...all of the recognizers available"; paragraph 23, lines 4 - 7);

assigning the speech utterance to a plurality of different ASR engines based on availability of the recognizers ("routed to one or more selected recognizers...all of the recognizers available"; paragraph 23, lines 4 - 7); and

generating text of the speech utterance with either the single ASR engine or plurality of ASR engines ("individual result sets are then coalesced"; paragraph 26, lines 1, and 2).

However, Bennett et al., do not specifically teach determining if assessing resources is within a threshold value.

Johnson et al., teach determining whether the usage level of the ASR input channels is greater than a first predetermined threshold, such as 75% threshold; and monitoring an energy level of a caller input channels (col.8, lines 37 – 40; Abstract, lines 16 – 18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine whether or not the recognizers are available as taught by Johnson et al., in Bennett et al., because that would help better rout the stream input.

As per claims 2, and 9, Johnson et al., further disclose monitoring port utilization for each ASR engine ("usage level of the ASR input"; col.8, lines 37 – 40).

As per claims 3, and 10, Johnson et al., further recite evaluating processing power ("detect energy"; col.5, lines 26 – 28).

As per claim 4, Johnson et al., further disclose monitoring memory utilization and input/output utilization ("memory buffer"; col.2, lines 23 – 25).

As per claim 5, Johnson et al., further disclose monitoring a number of users providing speech utterances ("active calls, as those callers"; col.4, lines 3 - 8).

As per claim 6, and 7, Johnson et al., further disclose determining if assessing resources is within a threshold value occurs when port utilization of the single ASR engine is lower than a port utilization threshold of about 80%; if assessing resources is within a threshold value occurs when port utilization of two ASR engines is lower than a predefined threshold of about 75% ("greater than a first predetermined threshold, such as 75% threshold "; col.8, lines 37 – 40; Abstract, lines 16 – 18).

As per claim 11, Bennett et al., further disclose combining results of ASR engines if the group of ASR engines is selected, the group of ASR engines being adapted to provide a more accurate recognition of the utterance than a single ASR engine ("individual result sets are then coalesced"; paragraph 26, lines 1 – 3; paragraph 43, lines 1 - 3).

As per claim 12, Bennett et al., further disclose evaluating resources of the system evaluates resources to simultaneously run multiple ASR engines ("simultaneous use of three machine speech recognition systems"; paragraph 31, lines 10 – 12).

As per claim 13, Johnson et al., further disclose evaluating resources of the system evaluates ASR ports, system resources and call handlers ("usage level of the ASR input"; col.8, lines 37 – 40; col.4, lines 3 - 8).

As per claim 15, Bennett et al., further disclose selecting an ASR engine that has most available resources ("high accuracy"; paragraph 20, lines 7 – 9).

As per claims 16, and 17, Johnson et al., further disclose a telephone network comprising at least one switching service point coupled to the computer system, wherein at least one communication device in communication with the switching service point to provide the speech utterance ("PSTN"; col.4, lines 1 - 3).

As per claims 18 - 20, Johnson et al., further disclose that the resource management application comprises a recognition proxy component and a resource monitoring component, wherein the resource management component collects and analyzes information about the resources available on the system, and wherein the resource monitoring component mediates between the plurality of ASR engines and the resource management component ("determining whether the usage level of the ASR input channels is greater than a first predetermined threshold, such as 75% threshold; and monitoring an energy level of a caller input channel"; col.8, lines 37 – 40; Abstract, lines 16 – 18).

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD SAINT CYR whose telephone number is (571) 272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 2727602. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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/Richmond Dorvil/

Supervisory Patent Examiner, Art Unit 2626